Step into the Trades

A GUIDE FOR CAREER COUNSELLORS AND EDUCATORS

Apprenticeship

Post-secondary education with a difference

Alberta Apprenticeship and Industry Training
Excellence through training and experience

Alberta
LEARNING

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The stylized Bear Paw symbol represents the steps taken during a career journey. We selected the bear paws to acknowledge the bear's significance in Aboriginal culture.

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For more copies of this booklet, contact your local Apprenticeship and Industry Training office or download it at www.tradesecrets.org

Step into the Trades
A GUIDE FOR CAREER COUNSELLORS AND EDUCATORS

Providing quality information about apprenticeship programs and careers in the trades

There are many career opportunities available in the trades. Alberta Learning is undertaking a communication initiative to enhance the number of Aboriginal people who choose the trades as a career option. Part of this initiative includes ensuring that students, career counsellors, teachers and parents/caregivers have access to accurate information about apprenticeship and the trades.

Step into the Trades - A Guide for counsellors and educators is a companion to *Step into the Trades*, an information guide for students. This booklet is intended as a resource for educators and career counsellors to introduce students to apprenticeship as one of the many kinds of post-secondary education available to them.

Trades - a path to a good future for Aboriginal youth

Learning a trade through an apprenticeship program is a viable alternative to traditional post-secondary education. A trade can offer Aboriginal youth a rewarding and satisfying career with excellent income and lifestyle benefits, including self-employment, management, teaching and other opportunities.

"As an Aboriginal tradesperson I'm aware of the challenges people from minorities sometimes face when seeking employment. My advice to anyone considering the trades is don't just talk about it, do it."

Gary Gladue, Welder, Fort McMurray

Aboriginal youth well positioned to meet the growing demand for skilled tradespeople

In Alberta and throughout Canada, the trades are in demand due to more people retiring than entering these careers. The large Aboriginal youth population in Alberta is well positioned to fill the growing demand for skilled tradespeople.

Exposing students to all the options

Deciding what to do after high school can be hard for many students. With so many different career choices, it's never too soon for students of any age to know their options. As an educator or career counsellor, you can expose students to a variety of options, including the trades.

Journey inside this booklet to learn more about the trades and apprenticeship programs.

What are the trades?

Trades are occupations in which standards have been set to promote quality work and skill excellence among tradespeople.

Skilled tradespeople trained through apprenticeship are involved in many areas of our lives. They build homes, shopping malls, arenas and schools. They repair the heating, cooling, electrical and plumbing systems in those buildings. We find skilled tradespeople in auto shops fixing cars, and on industrial sites making sure heavy equipment runs properly. They also work as cooks in restaurants and cruise ships, and as hairstylists in beauty salons.

"When I went to school it was hard to be away, it was very challenging. To help with that I just called home more often. Then I would get paid and I would see my pay cheque and I knew it was worth it."

Cory Cardinal, Welder, Lac La Biche

With over 50 designated trades and occupations to choose from, one may be right for students with an interest in apprenticeship training.

MYTH Trade jobs are low paying.

FACT Tradespeople earn $9-$35 an hour plus benefits, with some tradespeople earning more, depending on the trade and the location of the job. It is very common for tradespeople to earn more than $50,000 per year.

What is apprenticeship?

Apprenticeship is post-secondary education in which a student (apprentice) learns the practical and technical aspects of a trade through a combination of on-the-job training and work experience (80% of the learning) and technical training (20% of the learning). The apprentice is an employee who earns wages. This dual approach to training - learning by doing and classroom instruction - sets apprenticeship training apart from most other post-secondary programs.

Apprenticeship offers the best of both worlds - an education and paid work experience.

MYTH Apprenticeship is hands-on training only.

FACT An education through apprenticeship training involves both on-the-job training and classroom instruction. This dual approach to training develops workers who understand through experience the connection between theory and its real life application.

How does apprenticeship work?

On-the-job training - real world experience
About 80 per cent of apprenticeship training takes place on the job. There, apprentices learn the skills of the trade with the help of a qualified journeyman[1], just as an elder passes down knowledge to others.

Technical training - learning the theory
Technical training generally involves attending classroom sessions for three to 12 weeks per year depending on the trade at one of a number of training institutions in Alberta. In some trades, technical training delivery options such as distance learning, weekly apprenticeship training (classes one day a week) or on-the-job-site training are available.

"Once you have a trade, you can return home to your community and be an asset to your community. You will have a comfortable living and satisfaction in your job and in yourself that you did it."

Leon Cardinal, Business owner, Carpenter, Sputinow

Wages - real work, real money
Apprentices earn from 40 to 90 per cent of a journeyman's wage, depending on the trade and the amount of training the apprentice has completed. The wage increases as the apprentice moves from one period of apprenticeship to the next.

How does an apprentice progress through the training?

To progress from one period of training to the next, an apprentice must:

- Successfully complete the technical training.
- Pass the apprenticeship examination for that period of training.
- Have the required hours of on-the-job training and a satisfactory report from the supervisor.
- Have the record book that shows the hours an apprentice has worked and type of work performed stamped by the nearest Alberta Learning, Apprenticeship and Industry Training office.

How long is an apprenticeship program?

Depending on the trade it takes one to four years of on-the-job and technical training to become a skilled tradesperson.

MYTH Apprenticeship training is only available in construction trades.

FACT While the building/construction trades (carpenter, painter, bricklayer) are some of the better-known trades, there are more than 50 trades that are trained through apprenticeship programs. These trades include: electrician, cook, plumber, automotive service technician, sheet metal worker and boilermaker. Alberta has more than 40,000 registered apprentices learning trades related to a variety of industries.

[1] The term journeyman is used to describe both men and women.

What happens after an apprentice completes the on-the-job and technical training?

A person who completes an apprenticeship program becomes a certified journeyman.

A person who successfully completes the apprenticeship program receives an Alberta Journeyman Certificate and is a certified journeyman.

What are the entrance requirements for the trades?

Students are encouraged to finish high school.

To become an apprentice a student must meet the academic requirements of their trade. Many employers prefer to hire students who have completed high school. Today's trades require good math, science, reading and writing skills.

"Leaving home is part of life. You need to leave the home to pursue who you are; this is a stepping-stone for who you are becoming. The reward at the end is a good paying job and you will be respected by your community for the steps you took to better yourself."

Stonewall Jackson, Automotive Service Technician, Wabasca

When can a student start an apprenticeship program?

A student can start apprenticeship training as early as grade 10 through the Registered Apprenticeship Program (RAP). This is a great first step toward a career in the trades.

While going to high school, a RAP student earns hours of on-the-job training as credit toward both an apprenticeship program and a high school diploma/credential. RAP students work at a job directly related to their future career. RAP also offers the opportunity to explore career options through work experience.

The student's work schedule depends on the agreement he/she makes with the school and employer. The possibilities include: working one semester and going to school the next; working half a day and attending school the other half; or going to school during the regular term and working holidays and weekends.

MYTH The trades are for people who can't get into university.

FACT An education through apprenticeship is similar to any other post-secondary program. It takes dedication and hard work to be successful in an apprenticeship program. Apprentices must have good math, science, reading and writing skills. A high school diploma is a requirement for some of the trades. Many employers prefer to hire apprentices who have completed high school.

MYTH If students start apprenticeship training in high school they will miss out on learning the basics like reading, writing and math.

FACT Apprenticeship supports a strong academic foundation in reading, math, writing and the sciences. Apprenticeship is designed to teach highly technical skills and produce skilled workers competent in all aspects of a trade. Taking instruction on the job helps students understand the relationship between the information learned in school and the skills necessary for success in the work place.

What is the process for entering an apprenticeship program?

There are four or five steps to entering an apprenticeship program, depending on whether a student enters RAP or starts after high school.

STEP 1

Finish high school (not required to start RAP)

Many trades require a high school diploma/credential, and some require advanced math and science. Employers prefer to hire high school graduates when they're recruiting apprentices.

"People in the trades are professionals and are as important as any other profession. The trades are great for people who enjoy hands-on, challenging work."

Rod Stagg, Business owner, Plumber, Steamfitter-Pipefitter and Gasfitter, Calgary

STEP 2

Decide which trade matches interests and skills

Students should think about who they are, what they like to do, what kind of lifestyle they enjoy, and what they would like to do 10 years from now. You may contact a local Alberta Learning, Apprenticeship and Industry Training office to place students in touch with an Aboriginal role model - someone in a trade - who would be happy to answer questions about this career path.

STEP 3

Find an Employer

Once a student has decided on a trade, the next step is to find an employer who will offer apprenticeship training. This is just like finding any job. There are over 11,000 employers in Alberta currently training apprentices.

STEP 4

Apply

Once a student finds an employer, he/she should contact any Alberta Learning, Apprenticeship and Industry Training Office or visit the "Forms" section of www.tradesecrets.org for an apprenticeship application/ contract. Once the student and the employer sign the application/ contract, it must be sent to the nearest Apprenticeship and Industry Training office. For a list of offices around Alberta, see the last page of this Guide.

STEP 5

Commitment

The signed application/contract is a written agreement between the apprentice and the employer, approved by and registered with Alberta Learning, Apprenticeship and Industry Training. This agreement specifies the length of training, related technical training, an outline of the skills of the trade to be learned and the percentage of wages the apprentice will be paid. After successfully completing the prescribed hours of on-the-job and technical training, and all exams, the apprentice will graduate as a highly skilled journeyman.

How will I know if a student is suited to study a trade?

Students who enjoy working with their hands to fix or put things together, are good with numbers, interested in machines, tools or equipment and learn best by doing, may be interested in one of the trades. Please see pages 10-31 for information on skills and interests associated with each trade.

Most people working in the trades:

- Arrive at work on time ready to tackle the day.
- Read blueprints.
- Perform calculations quickly and accurately.
- Are able to easily move their hands in placing and turning motions, for example, to turn knobs and levers on a control panel or to climb ladders (manual dexterity).
- Have good eye-hand coordination needed to drive a nail with a hammer or perform detailed work.
- Stand and bend with ease throughout the day.
- Work comfortably from high places (at heights).
- Follow directions, both verbal and written.
- Cooperate with others to get the job done.
- Visualize something from pictures, drawings, or blueprints.
- Keep up with advances in their field - lifelong learners.
- Work an average of 40 hours each week.

"It is a life long learning opportunity. Once you get into the trades, the doors are wide open. There is a lot of satisfaction and you get a name for yourself when you finish. Don't be afraid or scared of trying it. You need to get out in the workforce, and it's an opportunity to meet your challenges."

Robert (Bob) Golosky, Business owner, Welder and Boom Truck Operator, Fort McMurray

Can a tradesperson work anywhere in Canada?

Tradespeople with a Red Seal can work anywhere in Canada without additional provincial or territorial examinations.

A journeyman who holds a certificate in one of the Interprovincial Standards (Red Seal) trades can write an Interprovincial Standards (Red Seal) exam. If the exam is passed, a "Red Seal" is attached to the Alberta Journeyman Certificate allowing the tradesperson to work anywhere in Canada. Alberta produces more tradespeople with an Interprovincial Standards Red Seal than any other jurisdiction in Canada.

MYTH Jobs in the trades are not stable. They are dead-end jobs.

FACT According to the 2003 survey of Alberta apprenticeship graduates, 93 per cent of those in the labour force were employed, and 97 per cent of those employed were working in the trade in which they apprenticed. A trade is one of the most transferable careers in today's global economy. Many occupational groups in Alberta are expected to need more workers, including the trades (Alberta Careers Update 2003, Alberta Human Resources and Employment).

What can I tell parents/caregivers about the value of an apprenticeship program for their child?

Learning a trade through apprenticeship leads to a well-paying, satisfying and marketable career.

When talking with a parent/caregiver about apprenticeship as a post-secondary choice, there are many benefits worth highlighting:

- An apprenticeship program offers paid work while training for a career.
- Apprentices see first hand how technical tasks relate directly to theoretical knowledge.
- Apprenticeship programs provide students with a sense of independence and accomplishment.
- Transferable skills provide an opportunity for tradespeople to work anywhere in Canada.
- Journeymen have the opportunity to move up into supervisory or management positions or start a business.
- Many successful Aboriginal men and women are skilled tradespeople.
- Apprenticeship training provides marketable skills that last a lifetime!

"It was hard moving to Edmonton and finding a place to live, but I did it. I made friends in my class, I worked hard, I went home on weekends and I just kept at it. It is the best thing I have ever done."

Christine Featherstone, Welder, Leslieville

Informing Parents/Caregivers about Apprenticeship

Host an evening orientation to apprenticeship training with speakers from the various trades - both Aboriginal employers and journeymen. Alberta Learning, Apprenticeship and Industry Training would be pleased to facilitate such sessions.

How can I raise awareness of apprenticeship and the trades as viable career options?

You can provide students with an opportunity to explore career options through some of the following suggested activities. These suggestions can be incorporated into existing courses designed to raise students' awareness of various career choices.

Help students know their options

Activities and discussions:

- Discuss apprenticeship as one of the post-secondary learning choices available.
- Have students describe some of the trades.
- Help students investigate a trade they find interesting.
- Have students describe the steps to entering apprenticeship.
- Contact Apprenticeship and Industry Training to request a presentation on apprenticeship by a Consultant, an Aboriginal tradesperson and/or an Aboriginal Youth Ambassador. (See the back of this Guide for the office nearest you.)
- Have students participate in career fairs and go on field trips.

MYTH Work in the trades is dirty and noisy.

FACT While many people who work in the trades work outdoors, not all of these jobs are dirty and noisy. Many tradespeople work with sophisticated computer equipment and technology, while others own their own business or are in supervisory positions.

Everyone has a role to play

Apprentices are responsible for:

- Completing the apprentice section of the apprenticeship application/contract.
- Completing the required on-the-job and technical training.
- Passing exams.
- Carrying and producing on request, an apprentice ID card.
- Ensuring the record book is updated.

Employers are responsible for:

- Completing the employer section of the apprenticeship application/contract.
- Providing the apprentice with on-the-job training supervised by a qualified journeyman.
- Paying the apprentice's wages.
- Allowing the apprentice time away from work to complete the required technical training.
- Updating the apprentice's record book.

Alberta Learning, Apprenticeship and Industry Training is responsible for:

- Facilitating the development, by industry, of technical training course outlines.
- Arranging technical training with training providers.
- Working with training providers to ensure training content is consistent across the province.
- Providing information to employers and apprentices that will facilitate apprenticeship training.
- Administering exams developed by industry.
- Verifying apprentice record books for the requirements of apprenticeship programs.
- Issuing certificates and maintaining records.
- Working with industry to ensure the continued success of the apprenticeship system.

Gather Information on Apprenticeship

You may want to ask students to:

- Gather information on various trades by using the Step into the Trades guide for students and/or the www.tradesecrets.org web site.
- Write a 300-word essay on one of the apprenticeship trades in Alberta.
- Prepare a list of questions to obtain information about a trade.
- Research prospective employers in an apprenticeship trade.

MYTH A university degree is the only ticket to a good future.

FACT A Journeyman Certificate is also a ticket to a great future. According to Job Futures 2000, by 2007, more than one-third of jobs created in Canada will require trade certification or a college diploma.

How much does apprenticeship training cost?

There is a tuition fee for technical training. Like all other adult learners, apprentices pay a portion of the cost of their training. The apprentice must pay the tuition fee to the educational institution before the start of class.

Tuition Fees 2003 to 2007

2003/2004 - $65.65 per week ($525 for 8 weeks)
2004/2005 - $81.25 per week ($650 for 8 weeks)
2005/2006 - $96.88 per week ($775 for 8 weeks)
2006/2007 - $112.50 per week ($900 for 8 weeks)

What financial assistance is available?

Registered apprentices in Alberta may be eligible for financial help while attending the technical training portion of an apprenticeship program. Options include:

Employment Insurance (EI) Benefits
Employment Insurance (EI) benefits are available for apprentices while attending technical training if they have worked sufficient hours to establish an EI claim. The amount of work needed to establish a claim varies. Contact Human Resources Development Canada (HRDC) at 1-800-206-7218 for information or visit the HRDC website at www.hrdc-drhc.gc.ca/ae-ei/employment_insurance.shtml

Grants
Sometimes EI benefits are not enough to meet the apprentice's costs while in technical training, or the apprentice may not have worked enough hours for EI eligibility. Grant-based financial assistance may be available from Alberta Human Resources and Employment for apprentices who:

- are attending full-time technical training as part of their apprenticeship program; and
- can demonstrate financial need.

An apprentice must submit an application for grant funding to Alberta Students Finance. (Request the Financial Assistance Package for Apprentices from Apprenticeship and Industry Training.) If the application is approved, the apprentice will receive financial assistance in the form of a grant that does NOT have to be repaid. The amount of financial assistance is based on the apprentice's demonstrated need. This grant is used to cover tuition, books and living expenses while attending the technical training part of their apprenticeship program. Extraordinary living costs will be considered if there is a documented need.

Scholarships
Each year, approximately 165 Alberta Apprenticeship and Industry Training Scholarships of $1000 each are provided to registered apprentices. The RAP Scholarships provide up to 50 scholarships of $1000 each to high school students participating in the Registered Apprenticeship Program (RAP). Alberta registered apprentices may qualify for other scholarships available through Alberta Learning's Alberta Scholarship Programs. For more information, contact Alberta Scholarship Programs at 780-427-8640, or visit www.alis.gov.ab.ca, or www.tradesecrets.org

Information
For more information about financial assistance for apprentices call the Career Information Hotline toll free at 1-800-661-3753, in Edmonton call 422-4266. Students may also check with their Aboriginal organization about Band or Aboriginal Human Resource Development Agreement funds.

BUILDING TRADES

Bricklayer, Cabinetmaker, Carpenter, Concrete Finisher, Crane and Hoisting Equipment Operator, Elevator Constructor, Floorcovering Installer, Glazier, Glazier - Auto Glass Technician, Lather - Interior Systems Mechanic, Painter and Decorator, Roofer and Tilesetter

All around us, skilled people are working in the construction industry building schools, hospitals and office towers. They are painting, roofing, finishing and completing other challenging jobs.

Apprenticeship training for trades in this category ranges from one to four years.

The building trades may appeal to those who:

- Enjoy working with their hands to put things together.
- Like working with tools and equipment.
- Enjoy working with numbers.
- Pay attention to detail.
- Can see the finished product from an idea or drawing.
- Are able to easily move their hands in placing and turning motions, for example, to turn knobs and levers on a control panel or to climb ladders (manual dexterity).
- Are imaginative and creative.

For current educational requirements, please contact Apprenticeship and Industry Training.

Note: Many employers prefer to hire apprentices who have completed high school.

Bricklayer ◈

These tradespeople lay bricks, concrete blocks, stone and other materials to build and repair walls, patios, fireplaces and chimneys. They use hammers, chisels or saws to cut and fit bricks. Their work also involves lining or relining furnaces, boilers and similar installations.

Length of Training

Years	On-the-Job	In-Class
3	1600 hours per year	8 weeks per year

Skills and Interests

- Physically fit
- Willing to work outdoors
- Good eye for detail and colour
- Good balance for working on scaffolding
- Likes working with numbers

Salary

$18 - $21 per hour plus benefits

Cabinetmaker ◈

Using sanders, planes, power saws and other tools, they build and repair furniture, cabinetry and other items made of wood or wood substitutes for commercial and residential use. Their trade involves sanding wood surfaces and applying veneer, stain, polish or plastic laminates.

Length of Training

Years	On-the-Job	In-Class
4	1360 hours per year	8 weeks per year

Skills and Interests

- Good eyesight
- Good eye-hand coordination
- Artistically inclined

Salary

$14 - $19 per hour plus benefits

◈ Red Seal Program allows qualified journeymen to work in most Canadian provinces or territories

Carpenter ◈

This skilled trade had a role in almost every building around you. Using hand tools and power tools, carpenters build and repair buildings and other structures made of wood, wood substitutes, steel and other materials.

Length of Training

Years	On-the-Job	In-Class
4	1360 hours per year	8 weeks per year

Skills and Interests

- Artistically inclined
- Enjoys working with wood
- Moves hands easily in placing and turning motions to climb ladders, saw and hammer etc. (manual dexterity)
- Good balance for working on scaffolding
- Willing to stand for long periods and climb, bend and kneel throughout the day
- Good math skills to measure materials
- Able to lift between 11 and 25 kilograms

Salary

$17 - $25 per hour plus benefits

Concrete Finisher ◈

From sidewalks, patios, bridges, large buildings and other concrete structures those working in this skilled trade pour and finish the concrete using hand and power tools. They also repair hardened concrete structures.

Length of Training

Years	On-the-Job	In-Class
3	1200 hours per year	4 weeks in year 1 and 2

Skills and Interests

- Enjoys strenuous work
- Willing to bend, stoop and kneel throughout the day

Salary

$16 - $23 per hour plus benefits

Crane and Hoisting Equipment Operator

This tradesperson doesn't need strength to lift heavy objects like gravel or construction supplies, he/she uses a crane with a boom that expands and pulls in to lower or raise a hook that attaches to the load. At construction or industrial sites, ports, railway yards, factories, and warehouses, operators control a number of pedals and levers to rotate the crane, and raise and lower its boom and one or more loadlines, often all at the same time. They also clean and oil the equipment.

Heavy Boom Truck Operator

Works a boom truck that can lift 20 tons or greater.

Length of Training

Years	On-the-Job	In-Class
2	1000 hours per year	4 weeks per year

Medium Boom Truck Operator

Works a boom truck that can lift between 5 and 20 tons.

Length of Training

Years	On-the-Job	In-Class
1	1000 hours	4 weeks

Mobile Crane Operator

Works booms mounted on crawlers or wheeled frames. They may also drive the crane to the job site, rig the machine up (pin the boom and pendant cables, and pull the hoist cable in preparation for operation), and set up the machine for the lift.

Length of Training

Years	On-the-Job	In-Class
3	1500 hours per year	4 weeks in year 1 5 weeks in year 3

◈ Red Seal Program - allows qualified journeymen to work in most Canadian provinces or territories

Tower Crane Operator

Works a mechanical device or structure of a traveling, fixed or climbing type used for raising or lowering materials.

Length of Training

Years	On-the-Job	In-Class
2	1000 hours per year	3 weeks in year 1

Wellhead Boom Truck Operator

Works a boom truck that is used exclusively to work on wellhead, pumping and other operations.

Length of Training

Years	On-the-Job	In-Class
1	100 hours	3 days

Skills and Interests

- Very focused/high concentration level
- Good eyesight
- Good eye-hand coordination
- Comfortable with heights

Salary

$12 - $28 per hour plus benefits

Elevator Constructor

Making sure our ride is smooth. Working at construction sites, in offices, apartment buildings and at industrial sites, the elevator constructor installs, changes and fixes electric and hydraulic elevators, personnel and man-hoists, moving walkways, escalators and related equipment.

Length of Training

Period*	On-the-Job	In-Class
3 periods	1000 hours in period 1 3000 hours in period 2 4000 hours in period 3	Training is under development

* A period of training for this trade ranges from six to 24 months.

Skills and Interests

- Mechanically inclined
- Works well in a small crew without direct supervision
- Pays attention to detail

Salary

$22 - $32 per hour plus benefits

Floorcovering Installer ◆

Think about this trade with every step you take. This tradesperson installs, repairs and replaces flooring such as underpadding, carpet, tiles, hardwood, plastic laminates and other decorative coverings in residential, commercial and industrial locations. They use measuring, hammering, spreading and cutting and shearing tools as well as power tools, floor preparation and stretching tools and lifting equipment.

Length of Training

Years	On-the-Job	In-Class
3	1390 hours in year 1 1420 hours in year 2 1600 hours in year 3	7 weeks in year 1 6 weeks in year 2

Skills and Interests

- Physical strength and energy
- Lifts awkward loads over 25 kilograms
- Good colour vision to match colours

Salary

$14 - $28 per hour plus benefits

Glazier ◈

Works with glass to cut, install and repair mirrors, windows and aluminium doors and other glass for commercial, residential and automotive use.

Length of Training

Years	On-the-Job	In-Class
4	1620 hours per year	6 weeks per year

Skills and Interests

- Physical strength and energy to work with heavy glass materials
- Able to work at heights
- Good eyesight to measure, cut and see flaws in glass
- Moves hands easily in placing and turning motions to climb ladders, operate power tools etc. (manual dexterity)

Salary

$17 - $20 per hour plus benefits

Glazier – Auto Glass Technician

This trade removes, installs and sets glass for vehicles and off-road equipment.

Length of Training

Years	On-the-Job	In-Class
2	1620 hours per year	6 weeks per year

Skills and Interests

- Physical strength and energy to work with heavy glass materials
- Good eyesight to measure, cut and see flaws in glass
- Moves hands easily in placing and turning motions to climb ladders, operate power tools etc. (manual dexterity)

Salary

$14 - $20 per hour plus benefits

Lather – Interior Systems Mechanic ◈

Creates space by putting together and installing the frameworks for gypsum materials (or drywall sheets, thin layers of gypsum between two layers of heavy paper) in buildings.

Length of Training

Years	On-the-Job	In-Class
3	1560 hours in year 1 1620 hours in year 2 1560 hours in year 3	8 weeks in year 1 6 weeks in year 2 8 weeks in year 3

Skills and Interests

- Good hand-eye coordination
- Visualizes how things come together
- Able to bend and lift
- Able to work at heights
- Spots differences in how things appear

Salary

$16 - $22 per hour plus benefits

Painter and Decorator ◈

You know the job is almost done when these tradespeople arrive to prepare and apply paint, stain, varnish, wallpaper, fabric, and other materials to surfaces like floors, doors, walls and trim.

Length of Training

Years	On-the-Job	In-Class
3	1300 hours per year	8 weeks per year

Skills and Interests

- Imaginative
- Good colour sense
- Able to work at heights
- Able to stand, kneel and crouch for long periods

Salary

$14 - $24 per hour plus benefits

◈ **Red Seal Program** – allows qualified journeymen to work in most Canadian provinces or territories

Roofer ◈

Whether it's metal or asphalt shingles, tar, gravel or other materials, roofers prepare, install and repair them. They also apply weatherproofing mix to flat and sloped roof surfaces using hatchets, hammers, pry bars, tin snips, knives and chalk lines.

Length of Training

Years	On-the-Job	In-Class
4	1420 hours in years 1-3 1600 hours in year 4	6 weeks in years 1-3

Skills and Interests

- Able to work at heights
- Able to lift over 25 kilograms
- Basic math skills
- Physical strength and energy

Salary

$17 - $22 per hour plus benefits

Tilesetter

Workers in this trade use their artistic talent to cover, fix and decorate exterior and interior walls, floors and other surfaces using ceramic, marble, slate, stone or granite in the residential, commercial and industrial settings.

Length of Training

Years	On-the-Job	In-Class
3	1600 hours per year	8 weeks in year 1 and 2

Skills and Interests

- Able to lift over 25 kilograms
- Some artistic ability
- Attention to detail
- Able to visualize

Salary

$17 - $22 per hour plus benefits

ELECTRICAL TRADES

Communication Technician, Electrical Motor Systems Technician, Electrician, Electronic Technician, Power Lineman and Power System Electrician

They light up our lives and make our gadgets hum. A career in one of these trades may involve work on construction or industrial sites, power stations, and electrical supply companies.

Apprenticeship training for trades in this category is four years.

The electrical trades may appeal to those who:

- Are interested in electronics and how things work.
- Are strong in math and science.
- Like working with tools and equipment.
- Are able to easily move their hands in placing and turning motions to use screwdrivers, pliers etc. (manual dexterity).
- Are able to quickly and accurately manipulate small objects with their fingers, for example to place a screw (finger dexterity).
- Pay attention to detail.
- Have good colour vision.

For current educational requirements, please contact Apprenticeship and Industry Training.

Note: Many employers prefer to hire apprentices who have completed high school.

◈ **Red Seal Program** - allows qualified tradespersons to work in most Canadian provinces or territories

Communication Technician

In the 21st century we definitely can't get along without this trade to install, maintain, remove and repair wiring networks, consumer communication equipment, switchboards and specialized equipment such as intercoms, fax machines, computer networks and electronic key systems. They also maintain and repair microwave, television, toll and switching equipment used to provide local or long distance service.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Skills and Interests

- Mechanical ability
- Analytical ability
- Able to do fine, precise work with their hands
- Normal colour vision to work with colour-coded wiring

Salary

$17 - $23 per hour plus benefits

Electrical Motor Systems Technician ◈

They are responsible for testing, rebuilding and repairing electric motors, generators, transformers, controllers and related electrical and mechanical equipment used in commercial, industrial and institutional establishments.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Skills and Interests

- Mechanical skill and interest
- Ability to lift up to 25 kilograms
- Attention to detail
- Moves hands easily in placing and turning motions to use screwdrivers, pliers etc. (manual dexterity)

Salary

$13 - $21 per hour plus benefits

Electrician ◈

Bringing electricity where it's needed, they install, test, and fix electrical wiring, fixtures and control devices using tools such as screwdrivers, pliers, knives and hacksaws. They also use power tools and testing equipment.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours in years 1-3 1350 hours in year 4	8 weeks in years 1-3 12 weeks in year 4

Skills and Interests

- Good colour vision to work with colour-coded wiring
- Good with numbers
- Moves hands easily in placing and turning motions to use screwdrivers, pliers etc. (manual dexterity)
- Able to work at heights
- Precise

Salary

$17 - $24 per hour plus benefits

Electronic Technician ◈

Services and repairs electronic equipment, such as radios, televisions, CD players and home computers. They use various testing equipment such as voltmeters, oscilloscopes, signal generators and frequency counters.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Skills and Interests

- Moves hands easily in placing and turning motions to use screwdrivers, pliers etc. (manual dexterity)
- Normal colour vision
- Able to concentrate

Salary

$12 - $22 per hour plus benefits

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Power Lineman ®

When there's trouble with your power, the power lineman finds the source of the problem and fixes it. They also build overhead and underground power lines used to carry electricity from generating plants to the customer. They put up and maintain poles and towers as well as install and look after street lighting systems.

Length of Training

Years	On-the-Job	In-Class
4	1525 hours in years 1-3 1800 hours in year 4	8 weeks years 1-3

Skills and Interests

- Able to lift heavy objects up to 25 kilograms
- Good hearing and colour vision
- Able to work at heights and in different and extreme weather

Salary

$17 - $25 per hour plus benefits

Power System Electrician

This tradesperson works in substations or metering, to install, maintain and repair electrical power generation, transmission and distribution systems and equipment.

In substations, work with high voltage equipment such as circuit breakers, transformers, switches and the control circuits for protection, indication and monitoring systems. Involves adjusting relays, working on safety devices, and maintaining the large switch gear.

In metering, work with recording devices such as supervisory controls, indicating and recording devices, switchboards and equipment circuitry found in generating stations and powerhouses. They may install "demand" meters when a client company wishes to review the way it is billed for power usage.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours in year 1 and 2 1425 hours in year 3 and 4	8 weeks in year 1 and 2 10 weeks in year 3 and 4

Skills and Interests

- Attention to detail
- Ability to handle heavy switch gear
- Works with precision instruments to "fine tune" equipment

Salary

$17 - $25 per hour plus benefits

® **Red Seal Program** – allows qualified journeymen to work in most Canadian provinces or territories

INDUSTRIAL TRADES

Instrument Technician, Insulator, Millwright, Sawfiler and Water Well Driller

These skilled tradespeople usually work at industrial sites constructing and taking care of machines and parts used in industrial and consumer products. They use precision machinery, various power hand tools, power machines, torches and welding equipment

Apprenticeship training for trades in this category ranges from two to four years.

The industrial trades may appeal to those who:

- Enjoy repairing or putting together machinery (mechanically inclined).
- Enjoy working with numbers.
- Are able to easily move their hands in placing and turning motions to operate testing equipment etc. (manual dexterity).
- Like working with tools and equipment.
- Work in these trades could involve working in tight spaces and in noisy atmospheres

For current educational requirements, please contact Apprenticeship and Industry Training.

Note: Many employers prefer to hire apprentices who have completed high school.

Instrument Technician ◈

Installs, maintains and repairs the control and metering systems used in industrial and commercial processing. Uses electrical and electronic devices to check, test, measure and control variables such as pressure, flow, temperature, motion and force.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours in year 1 and 2 1425 hours in year 3 and 4	8 weeks in year 1 and 2 10 weeks in year 3 and 4

Skills and Interests

- Attention to detail
- Able to work in tight or high places
- Can handle noisy, dusty or cold and warm surroundings

Salary

$17 - $25 per hour plus benefits

Insulator ◈

The work of this tradesperson keeps us cool in the summer, warm in the winter and stops noise and fire from spreading. The insulator applies, removes and repairs insulation using hand and power tools keeping us warm or cool, and to stop noise and fire from spreading. They also install vapour barriers around windows and doors. Insulation is glued, taped, stapled or blown into place.

Length of Training

Years	On-the-Job	In-Class
4	1375 hours in year 1 and 2 1300 hours in year 3 1600 hours in year 4	6 weeks in year 1 and 2 8 weeks in year 3

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Skills and Interests

- Comfortable with heights and working in tight places.
- Able to work indoors and outdoors in very hot or cold settings
- Can handle dusty surroundings

Salary

$17 - $24 per hour plus benefits

Millwright ◆

Depended on by industry to install machinery and keep equipment running smoothly, the millwright installs, tests and fixes machinery and equipment in factories, production plants and recreational facilities.

Length of Training

Years	On-the-Job	In-Class
4	1560 hours per year	8 weeks per year

Skills and Interests

- Mechanically inclined
- Enjoys fixing things

Salary

$18 - $25 per hour plus benefits

Sawfiler

Using hand tools, filing machines and welding equipment, sharpen and repair saws including band saws, chain saws and circular saws for the lumber and wood products processing plants (Circular Sawfilers deal with all saws except band saws).

Sawfiler

Length of Training

Years	On-the-Job	In-Class
4	1680 hours per year	4 weeks per year

Circular Sawfiler

Length of Training

Years	On-the-Job	In-Class
3	1680 hours per year	4 weeks per year

Skills and Interests

- Moves hands easily in placing and turning motions (manual dexterity)
- Good eye-hand coordination
- Can handle noisy surroundings and lifting of heavy objects
- Willing to live and work in remote areas

Salary

$14 - $22 per hour plus benefits

Water Well Driller

Sets up and operates a variety of drilling rig equipment to drill residential, commercial and industrial water wells. Also conducts environmental assessment drilling. Works with mobile drilling rigs to bore a hole for a well and line the hole with well casings.

Length of Training

Years	On-the-Job	In-Class
2	1800 hours per year	6 weeks per year

Skills and Interests

- Likes to work outdoors and travel to various sites
- Can handle work that is strenuous, noisy and dirty

Salary

$12 - $19 per hour plus benefits

◆ Red Seal Program - allows qualified journeymen to work in most Canadian provinces or territories

METAL TRADES

Ironworker, Ironworker - Metal Building Systems Erector, Machinist, Sheet Metal Worker, Structural Steel and Plate Fitter, Tool and Die Maker and Welder

Working indoors in shops and/or outdoors in all kinds of weather, work in the metal trades means making products using machines and tools.

Apprenticeship training for the trades in this category ranges from two to four years.

The metal trades may appeal to those who:

- Enjoy repairing or putting together machinery (mechanically inclined).
- Are able to easily move their hands in placing and turning motions to use wrenches etc. (manual dexterity).
- Like working with tools and equipment.
- Are able to measure distance by sight (depth perception).
- Have good eyesight.
- Have excellent eye-hand coordination to perform detailed work.
- Are able to concentrate on detailed work.
- Can see the finished product from an idea or drawing.
- Have patience.
- Work in these trades could involve working in high, awkward and noisy places.

For current educational requirements, please contact Apprenticeship and Industry Training.

Note: Many employers prefer to hire apprentices who have completed high school.

Ironworker ®

Helps put up buildings, bridges and other structures, installs conveyors and robotic equipment and sometimes performs work on existing structures and bridges, and tears down structures.

Length of Training

Years	On-the-Job	In-Class
3	1500 hours per year	10 weeks in year 1 7 weeks in year 2 and 3

Skills and Interests

- Mechanical skill and interest
- Good eye-hand coordination
- Comfortable with heights
- Good balance and eyesight
- Able to measure distance by sight (depth perception)

Salary

$18 - $28 per hour plus benefits

Ironworker – Metal Building Systems Erector

Puts up steel framed one-story buildings.

Length of Training

Period*	On-the-Job	In-Class
1	3000 hours over the period	10 weeks over the period

* A period of training for this trade is 24 months.

Skills and Interests

- Mechanical skill and interest
- Good eye-hand coordination
- Comfortable with heights
- Good balance and eyesight
- Able to measure distance by sight (depth perception)

Salary

$14 - $28 per hour plus benefits

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Machinist ◈

Sets up and operates metal cutting and grinding machines to manufacture and repair products made from a variety of materials. Works with hand and power tools and metal working machines, such as lathes, milling machines, drills and grinders.

Length of Training

Years	On-the-Job	In-Class
4	1560 hours per year	8 weeks per year

Skills and Interests

- Can handle noisy, dusty surroundings and working with dirty materials
- Comfortable standing for long periods

Salary

$14 - $25 per hour plus benefits

Sheet Metal Worker ◈

Designs, makes, joins, installs and fixes sheet metal products for different industries and settings. Fits and joins sheet metal with welding and other equipment to make products like ventilation shafts, partition frames, air and heat ducts, roof decking and sheet metal buildings. Uses black and galvanized steel, copper, brass, nickel, stainless steel, aluminium and tin plate.

Length of Training

Years	On-the-Job	In-Class
4	1425 hours per year	10 weeks per year

Skills and Interests

- Pays attention to detail
- Able to estimate size and dimensions from blueprints
- Good eyesight
- Moves hands easily in placing and turning motions (manual dexterity)
- Able to visualize a finished product from a drawing

Salary

$18 - $26 per hour plus benefits

Structural Steel and Plate Fitter ◈

Lays out, prepares and assembles structural steel and steel vessels, containers and other components used for buildings, bridges, plates for tanks, boilers and similar products. Uses metal-working machines and cutting torches to cut steel, drill or punch holes and roll, bend or press steel into required shapes.

Length of Training

Years	On-the-Job	In-Class
3	1500 hours per year	8 weeks per year

Skills and Interests

- Can handle noisy and dusty surroundings
- Able to work in tight places
- Good coordination
- Mechanical skill and interest
- Moves hands easily in placing and turning motions (manual dexterity)

Salary

$15 - $21 per hour plus benefits

Tool and Die Maker ◈

Using metal cutting machines and other equipment, these skilled workers make and repair tools, dies (metal forms used to shape metal) and special devices used in machines that make clothing, heavy equipment, parts for cars and other industrial and consumer products.

Length of Training

Years	On-the-Job	In-Class
4	1560 hours per year	8 weeks per year

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Skills and Interests

- Mechanical skill and interest
- Moves hands easily in placing and turning motions (manual dexterity)
- Good at math and physics
- Good eyesight and hand-eye coordination
- Able to visualize a finished product
- Able to lift between 11 and 25 kilograms

Salary

$16 - $22 per hour plus benefits

Welder ◆

Joins metal pieces together or shapes metal using manual or semi-automatic welding equipment.

Length of Training

Years	On-the-Job	In-Class
3	1560 hours per year	8 weeks per year

Skills and Interests

- Mechanical skill and interest
- Able to move the fingers and manipulate small objects with the fingers quickly and accurately (finger dexterity)
- Good eyesight and eye-hand coordination

Salary

$20 - $30 per hour plus benefits

PIPING TRADES

Boilermaker, Gasfitter - First Class, Plumber, Steamfitter-Pipefitter and Sprinkler Systems Installer

It's all about pipes - from those in homes to those at industrial sites - trades in this category involve installing, fixing and maintaining piping systems.

Apprenticeship training for trades in this category ranges from three to four years.

The piping trades may appeal to those who:

- Enjoy math and sciences.
- Enjoy using hand and power tools.
- Like to take apart and put together machinery and motors (mechanically inclined).
- Are able to easily move their hands in placing and turning motions to use wrenches etc. (manual dexterity).
- Enjoy precise work.
- Are able to work from high places.
- Tolerate unpleasant weather, noise and odours.

For current educational requirements, please contact Apprenticeship and Industry Training.

Note: Many employers prefer to hire apprentices who have completed high school.

◈ **Red Seal Program** - allows qualified journeymen to work in most Canadian provinces or territories

Boilermaker ◆

Builds, tests, and repairs boilers, vessels or other liquid-tight containers, structures, and equipment. Uses hand and power tools, welding equipment, and metal working machines, such as drill presses, shears, brakes, rolls and flame cutters.

Length of Training

Years	On-the-Job	In-Class
3	1500 hours per year	12 weeks year 1 6 weeks year 2 and 3

Skills and Interests

- Willingness to work in tight spaces
- Can handle odours, noisy and dirty surroundings
- Comfortable with heights

Salary

$18 - $25 per hour plus benefits

Gasfitter – First Class

Sizes, installs, tests and fixes natural gas and propane equipment ranging from residential furnaces to industrial boilers. This tradesperson works at utility, propane distributor and mechanical and services companies.

Length of Training

Years	On-the-Job	In-Class
3	1500 hours per year	8 weeks per year

Skills and Interests

- Mechanically inclined
- Moves hands easily in placing and turning motions (manual dexterity)
- Able to lift heavy objects up to 25 kilograms

Salary

$18 - $24 per hour plus benefits

Plumber ◆

Piping systems carry water, waste and gases, and plumbers are there to install, repair and maintain them. They also install fixtures like sinks and toilets and other plumbing systems in homes and buildings.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Skills and Interests

- Energy and strength to lift heavy pipes
- Able to stand for long periods and sometimes work in cramped positions

Salary

$18 - $24 per hour plus benefits

Steamfitter-Pipefitter

Puts together, makes, installs and repairs pipe systems that carry liquids and gases such as water, steam or air using hand or power tools or machines. They generally work with steam boilers and other high- and low-pressure steam systems.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Skills and Interests

- Pays attention to detail
- Moves hands easily in placing and turning motions (manual dexterity)

Salary

$18 - $24 per hour plus benefits

Sprinkler Systems Installer ◈

Part of keeping people safe during a fire depends on these skilled tradespeople who make, install, test, maintain and fix sprinkler systems used for fire protection in industrial operations, office buildings, hotels, schools, hospitals and homes.

Length of Training

Years	On-the-Job	In-Class
4	1600 hours in years 1-3 1800 hours in year 4	7 weeks in years 1-3

Skills and Interests

- Pays attention to detail
- Moves hands easily in placing and turning motions (manual dexterity)

Salary

$20 - $30 per hour plus benefits

SERVICE TRADES

Appliance Service Technician, Baker, Cook, Hairstylist, Landscape Gardener, Locksmith, Outdoor Power Equipment Technician and Refrigeration and Air Conditioning Mechanic

From landscape gardener to baker and locksmith, these skilled tradespeople provide service to the public.

Apprenticeship training for trades in this category ranges from two to four years.

The service trades may appeal to those who:

- Enjoy working with and being around people.
- Like creating things from scratch
- Like to figure out solutions to problems.
- Are able to easily move their hands in placing and turning motions (manual dexterity).
- Are able to quickly and accurately manipulate small objects with their fingers (finger dexterity).
- Have a good sense of proportion.

For current educational requirements, please contact Apprenticeship and Industry Training.

Note: Many employers prefer to hire apprentices who have completed high school.

◈ **Red Seal Program** allows qualified tradespersons to work in most Canadian provinces or territories

Appliance Service Technician ◈

When ovens, washers, dryers and freezers, refrigerators and dishwashers break down, these technicians are there to fix them. They take the appliance apart, clean its parts, replace and reassemble parts and test appliances to make sure they are working. They also install household and commercial appliances.

Length of Training

Years	On-the-Job	In-Class
3	1600 hours per year	8 weeks in year 1 and 2 6 weeks in year 3

Skills and Interests

- Good eyesight and colour vision
- Able to stand, bend, reach and kneel throughout the day

Salary

$17 - $22 per hour plus benefits

Baker ◈

Makes the bread, cookies, cakes, pies and other baked goods we eat by carefully weighing, measuring, and mixing the ingredients according to the recipe. Works with a variety of kitchen utensils and large and small appliances.

Length of Training

Years	On-the-Job	In-Class
3	1560 hours per year	8 weeks per year

Skills and Interests

- Willing to stand for long periods
- Responsible attitude to maintain a high standard of cleanliness necessary in the food industry

Salary

$10 - $16.50 per hour plus benefits

Cook ◈

In hotels, restaurants, hospitals and other places, cooks plan menus and prepare all sorts of meals.

Length of Training

Years	On-the-Job	In-Class
3	1560 hours per year	8 weeks per year

Skills and Interests

- Enjoys working with food
- Willing to stand for long periods
- Works quickly and carefully
- Responsible attitude to maintain a high standard of cleanliness necessary in the food industry

Salary

$9 - $12 per hour plus benefits

Hairstylist ◈

Whether it's a trim or makeover, hairstylists use their skills to shampoo, cut, colour and style hair. They maintain, clean and sterilize equipment, including brushes, combs, clippers and scissors.

Length of Training

Years	On-the-Job	In-Class
2	1400 hours per year	10 weeks per year

Skills and Interests

- Willing to stand for long periods and bend throughout the day
- Keeps up to date on new hair fashions and trends

Salary

$10 - $17 per hour plus benefits

Landscape Gardener

Whether it's private homes, commercial and public grounds, playgrounds, golf course or garden centres and greenhouses, this tradesperson plants and maintains greenery, trees, garden ornaments, lawns and other landscaping features using hand tools, equipment, machinery and chemical pesticides and fertilizers.

Length of Training

Years	On-the-Job	In-Class
4	1200 hours per year	8 weeks per year

Skills and Interests

- Able to work in all kinds of weather
- Able to lift over 25 kilograms

Salary

$16 - $20 per hour plus benefits

Locksmith

Installs, repairs, and adjusts locks; makes keys and changes lock combinations on residential, commercial and automotive locksets using hand and power tools. Some shops specialize in:

Shop Locksmith – makes, services or repairs locks

Mobile Locksmith - makes, services or repairs locks in the field

Safe and Vault or Bank Equipment Technician – opens, installs and services safes and vaults

Length of Training

Years	On-the-Job	In-Class
4	1560 hours per year	8 weeks per year

Skills and Interests

- Can work in small and confined spaces
- Good eye-hand coordination

Salary

$14 - $25 per hour plus benefits

Outdoor Power Equipment Technician

Repairs, services and maintains small gasoline and diesel powered recreational, marine and other equipment used by homeowners and industries, using hand and power tools and other equipment. Inspects and tests engines and motors, adjusts, repairs and replaces mechanical and electrical components. Outdoor power equipment technicians work in one of four areas:

Marine Equipment Technician - services outboard motors in boats and other watercrafts

Power Equipment Technician - services generators, mowers and chain saws

Recreational Equipment Technician - services snowmobiles and recreational utility vehicles

Turf Equipment Technician - services aerators and golf carts

Length of Training

Years	On-the-Job	In-Class
4	1000 hours per year	8 weeks in Years 1-3

Skills and Interests

- Can work with dirty and greasy materials
- Interested in all types of machinery and engines
- Enjoys working with people and providing good customer service

Salary

$8 - $18 per hour plus benefits

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Refrigeration and Air Conditioning Mechanic ◆

In homes, restaurants, grocery stores, hospitals and other sites, refrigeration and air conditioning systems and combined heating and cooling systems are installed, fixed and maintained by these tradespeople. When air conditioning and refrigeration equipment breaks down, these mechanics solve the problem by testing parts such as compressors and thermostats.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Skills and Interests

- Moves hands easily in placing and turning motions (manual dexterity)
- Moves fingers easily to place fine and small objects (finger dexterity)
- Able to tell colours apart
- Able to lift over 25 kilograms
- Uses sight, hearing, and smell to spot problems

Salary

$23 - $32 per hour plus benefits

VEHICLE/MOTOR RELATED

Agricultural Equipment Technician, Auto Body Technician, Automotive Service Technician, Heavy Equipment Technician, Motorcycle Mechanic, Parts Technician, Recreation Vehicle Service Technician and Transport Refrigeration Technician

We wouldn't be on the move without people working in these trades. They fix and look after cars, motorcycles, trucks, heavy equipment, farm machinery and the parts and equipment related to these vehicles.

Apprenticeship training for trades in this category ranges from two to four years.

The vehicle/motor related trades may appeal to those who:

- Like working on cars, trucks and other vehicles.
- Are able to easily move their hands in placing and turning motions to use wrenches etc. (manual dexterity).
- Like the challenge of finding out what is wrong with something and fixing it.
- Enjoy taking apart and putting together machinery and motors (mechanically inclined).
- Have the ability to estimate size and dimensions.
- Are able to visualize a finished piece of work from a sketch or brief description.
- Have good eyesight and are able to spot differences in the way something looks.
- Persist until the job is right.

For current educational requirements, please contact Apprenticeship and Industry Training.

Note: Many employers prefer to hire apprentices who have completed high school.

Agricultural Equipment Technician ◈

Repairs farm machinery, including tractors, combines, harvesters, ploughs, spreaders and sprayers. Work includes general repairs, routine inspections, overhauling machinery, replacing needed components, testing and diagnostics.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Skills and Interests

- Mechanical ability
- Good eye-hand coordination
- Strength to lift heavy machine parts

Salary

$16 - $28 per hour plus benefits

Auto Body Technician ◈

In your local body shop or dealership, this technician fixes and replaces damaged vehicle structures and body parts, and applies interior and exterior finishes. There are three branches to this trade.

Auto Body Prepper

Involved throughout the collision repair process, this skilled worker often begins with surface preparation, masking, priming and application of anti-corrosion compounds. They also remove and install bolt-on components such as hoods, decklids, fenders, trim, doors, glass and interior components.

Length of Training

Years	On-the-Job	In-Class
2	1600 hours in year 1 1800 hours in year 2	4 weeks in year 1

Auto Body Repairer

Restores the structural integrity of the damaged vehicle during the repair process. This generally involves cutting away damaged components and welding in new or recycled replacements. Precise work is critical to restore the vehicle to its pre-damaged condition and to ensure that suspension and steering components are accurately aligned.

Length of Training

Years	On-the-Job	In-Class
3	1600 hours in year 1 1500 hours in year 2 and 3	4 weeks in year 1 7 weeks in year 2 and 3

Auto Body Refinisher

This branch of the trade does damage appraisals, surface preparation, minor damage repairs, masking, colour matching, priming and top coating.

Length of Training

Years	On-the-Job	In-Class
2	1600 hours in year 1 and 2	4 weeks in year 1 6 weeks in year 2

Skills and Interests

- Strength and energy to handle heavy tools and parts
- Good eye for detail and colour
- Moves hands easily in placing and turning motions (manual dexterity)

Salary

$17 - $26 per hour plus benefits

Automotive Service Technician ◆

A worker in this trade is there to spot any potential problems on vehicles and light trucks. They also repair, adjust and test engines, steering systems, braking systems, drive trains, vehicle suspensions, electrical and air-conditioning systems and wheel alignments.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Skills and Interests

- Good hearing and eyesight
- Moves hands easily in placing and turning motions (manual dexterity)
- Mechanically inclined

Salary

$17 - $26 per hour plus benefits

Heavy Equipment Technician

Working in one of the four branches of this trade generally involves repairing, replacing and maintaining heavy vehicles and industrial equipment used in construction, logging, mining, forestry, farming and transportation.

Transport Trailer Mechanic

(previously Truck-Trailer Mechanic)
Maintains and repairs transport devices such as flat decks, dry freight vans, refrigerated vans, tankers, dump trailers and other commercial pull type devices.

Length of Training

Years	On-the-Job	In-Class
1	1500 hours	8 weeks

Truck and Transport Mechanic

Maintains and repairs trucks, buses and trailers and stationary and mobile internal combustion engines and components.

Length of Training

Years	On-the-Job	In-Class
3	1500 hours per year	8 weeks per year

Heavy Duty Equipment Mechanic (Off-Road)

Maintains and repairs vehicles and equipment such as stationary and mobile internal combustion engines and components, backhoes, trenchers, scrapers and trucks and trailers.

Length of Training

Years	On-the-Job	In-Class
3	1500 hours per year	8 weeks per year

Heavy Equipment Technician

Maintains and repairs vehicles and equipment including rippers, ditchers, backhoes, trenchers, trucks and trailers.

Length of Training

Years	On-the-Job	In-Class
4	1500 hours per year	8 weeks per year

Training for this branch certifies you in the other three branches as well.

Skills and Interests

- Good eyesight, hearing and sense of smell to diagnose problems
- Strength and energy to work with heavy equipment
- Able to work in cramped or awkward positions
- Mechanical ability and an interest in all types of machinery and engines, electronics and precision equipment

Salary

$16 - $28 per hour plus benefits

Motorcycle Mechanic ◈

Puts together, maintains, fixes and restores motorcycles, motor scooters and other multi-wheeled all-terrain vehicles. Spots failures with the electrical system, engine, power train, suspension or frame. Routine maintenance includes cleaning and adjusting the carburetor, adjusting the clutch, brakes and drive chain, and replacing worn parts.

Length of Training

Years	On-the-Job	In-Class
4	1360 hours in year 1 and 2 1420 hours in year 3 and 4	8 weeks in year 1 and 2 6 weeks in year 3 and 4

Skills and Interests

- Mechanically inclined
- Able to lift over 25 kilograms
- Moves hands easily in placing and turning motions (manual dexterity)

Salary

$15 - $25 per hour plus benefits

Parts Technician ◈

When equipment breaks down or wears out, it's up to the parts technician to make sure the parts are available for repairs or replacements. They order and keep track of parts for vehicles, appliances, machinery and equipment.

Length of Training

Years	On-the-Job	In-Class
3	1500 hours in year 1 1575 in year 2 and 3	8 weeks in year 1 6 weeks in year 2 and 3

Skills and Interests

- Basic math skills
- Attention to details, like parts catalogues and inventories

Salary

$13 - $19 per hour plus benefits

Recreation Vehicle Service Technician

Whether for motor homes or truck campers, tradespeople in this trade install and repair recreational vehicle parts, including appliances, furnaces, refrigerators, windows, doors and vents.

Length of Training

Years	On-the-Job	In-Class
3	1600 hours per year	8 weeks per year

Skills and Interests

- Moves hands easily in placing and turning motions (manual dexterity)
- Mechanical and electrical aptitude
- Able to balance and work from ladders
- Able to drive large vehicles

Salary

$12 - $18 per hour plus benefits

Transport Refrigeration Technician

The safe shipping of food and medical supply depends on properly functioning refrigeration units, which are installed, repaired and maintained by these tradespeople. They put together and install refrigeration components such as motors, compressors and gauges, repair and replace parts and components, and fix entire refrigeration systems.

Length of Training

Period*	On-the-Job	In-Class
3 periods	1800 hours per period	8 weeks per period

* A period of training for this trade is 14 months.

Skills and Interests

- Mechanical ability and interest
- Moves hands easily in placing and turning motions (manual dexterity)

Salary

$18 - $26 per hour plus benefits.

◈ **Red Seal Program** – allows qualified journeymen to work in most Canadian provinces or territories

DESIGNATED OCCUPATIONS

Construction Craft Labourer, Gas Utility Operator, Steel Detailer and Warehousing

The following four career choices are called designated occupations. Trainees complete a certain number of on-the-job training hours. Some also require in class training.

For current educational requirements, please contact Apprenticeship and Industry Training.

Note: Many employers prefer to hire trainees who have completed high school.

Construction Craft Labourer

Construction craft labourers prepare and cleanup the site, move materials, tools and equipment, and complete demolition and excavation activities. They put together and take apart scaffolding, ramps, catwalks, shoring and barricades at construction sites. They also operate jackhammers and drills to break up concrete or pavement.

Length of Training

Years	On-the-Job	In-Class
1	2000 hours	Consists of seven compulsory core training programs, along with one sector specific course and one from either an optional course or another sector specific course

Skills and Interests

- Physical strength and energy
- Moves hands easily in placing and turning motions (manual dexterity)
- Able to lift more than 25 kilograms

Salary

$10 - $22 per hour plus benefits

Gas Utility Operator

Making sure we have natural gas where we need it, the gas utility operator installs and takes care of gas utility pipeline systems that carry natural gas from its source to home furnaces and other places.

Length of Training

Years	On-the-Job	In-Class
2	1700 hours per year	6 weeks

Skills and Interests

- Mechanical skill and interest
- Moves hands easily in placing and turning motions (manual dexterity)
- Able to lift up to 25 kilograms

Salary

$12 - $22 per hour plus benefits

Steel Detailer

Working in an office, this specialized draftsman makes detailed shop or construction drawings used to make girders, beams, columns, stairways and other steel parts of buildings and structures.

Length of Training

Years	On-the-Job	In-Class
2-4	Work experience	CAD (computer-aided drafting/design) training

Skills and Interests

- Good computer and computer network skills
- Good eye for detail
- Enjoys math and physics

Salary

$12 - $35 per hour plus benefits

Warehousing

These tradespeople make sure products such as food, office supplies, tools and equipment get to where they are needed. There are three branches to this occupation – basic, intermediate and technician.

Basic

Responsible for general warehouse activities including receiving, storing and shipping products, handling and transportation.

Length of Training

Years	On-the-Job	In-Class
1	1500 hours	Modules 1-7*

Intermediate

Uses tools and equipment to manage the flow of goods into, within and from organizations.

Length of Training

Years	On-the-Job	In-Class
1	Basic certificate and 1500 hours	Basic certificate and modules 8-13*

Technician

Designs, plans, and manages the flow of goods into, within, and from organizations.

Length of Training

Years	On-the-Job	In-Class
1	Intermediate certificate and 1500 hours	Intermediate certificate and modules 14-20*

* Modules are 20-30 hours each.

Skills and Interests

- Physical strength and energy
- Able to stand most of the day
- Able to lift up to 25 kilograms
- Good math and computer skills

Salary

$8 - $16 per hour depending on category

Where can I get more information about apprenticeship and the trades?

Book a presentation or one-on-one meeting with an Apprenticeship and Industry Training consultant.

Apprenticeship and Industry Training consultants are committed to personally delivering information about apprenticeship to students, educators and career counsellors both in one-on-one discussions and group presentations.

Whenever possible, an Aboriginal role model will accompany Apprenticeship and Industry Training consultants to school presentations to offer a personal account of their trades experience. Please contact your local Apprenticeship and Industry Training office to book a presentation or meeting.

Other resources include:

Alberta Apprenticeship and Industry Training
www.tradesecrets.org
Information on trades and training in Alberta.

Trade-Up! Careers in Construction CD ROM
www.careersconstruction.com
Information on Interactive CD on the construction trades.

Trade-Up Counsellor Guide
www.careersconstruction.com/teachers/tradeup.pdf
Information on using the Trade-Up CD Rom.

Alberta Aboriginal Apprenticeship Project
www.thinktrades.com
Innovative pilot project that helps apprentices succeed.

CAREERS: The Next Generation
www.nextgen.org
Find out about hands-on learning for Alberta high school students.

Alberta Learning Information Service (ALIS)
www.alis.gov.ab.ca
Information on career planning, postsecondary education and training, educational funding, job searching, and labour market trends. Contains links to EDINFO (specific educational information for Alberta), and OCCINFO (occupational information and job futures for jobs in Alberta and Canada).

Essential Skills Portfolio Developer
portfolio.telecampus.com
Using this tool, students can decide what jobs they qualify for and develop a portfolio of skills.

Human Resources Development Canada
www15.hrdc-drhc.gc.ca
The Essential Skills Profiles portion of the web site contains examples of occupational tasks and skill levels.

Test of Workplace Essential Skills
www.towes.com/measureup.asp
This web site allows students to explore careers and test their skills.

Commonly Used Apprenticeship Terms

Accreditation

The recognition of training and credit granted towards an apprenticeship program.

Alberta Apprenticeship and Industry Training Board

Oversees the Alberta Apprenticeship and Industry Training system. Together with industry, the Board sets Alberta's training and certification standards. The Board is comprised of an equal number of employers and employees who work together on behalf of the designated trades and occupations.

Apprentice (Registered)

Is learning a trade under the supervision of a qualified journeyman and is registered with Alberta Learning, Apprenticeship and Industry Training to participate in an apprenticeship program.

Apprenticeship File Number

A unique number assigned to an individual's file by Alberta Learning.

Apprenticeship Update

The primary vehicle for the Alberta Apprenticeship and Industry Training Board to inform employers, journeymen, apprentices and trainees of changes in their trade or occupation. Also available on-line at www.tradesecrets.org, it is published three times a year with a circulation of about 70,000.

Certified Journeyman

The title given to an apprentice who successfully completes an apprenticeship program or to a person who has met industry trade standards through demonstrated work experience in the trade and successfully completed required examinations. This term is used to describe both men and women.

Competency

The knowledge, skills, attitudes and values demonstrated by people in their thought, conversation or behaviour.

Competency Based Apprenticeship Training (CBAT)

An approach to the technical training of apprentices that allows each apprentice to progress through technical training at a rate determined by his/her own capabilities and work experience.

Designated Occupation

An occupation designated under the Apprenticeship and Industry Training Act by the Minister of Learning on the recommendation of the industry and the Alberta Apprenticeship and Industry Training Board.

Designated occupations have clearly identified competencies. When an individual has achieved the occupation's identified competencies, the Minister grants an Occupational Certificate. Participation in a designated occupation is voluntary and a certificate is not required for an individual to work in the occupation. There are four designated occupations in Alberta.

Designated Trade

An occupation designated under the Apprenticeship and Industry Training Act by the Lieutenant Governor in Council on the recommendation of the industry, the Alberta Apprenticeship and Industry Training Board, and the Minister of Learning. The legislation provides for apprenticeship programs and certification of tradespeople as evidence that their qualifications meet the industry-established standards for the trade. There are approximately 50 designated trades in Alberta.

Individual Learning Module (ILM)

These are self-contained modularized learning materials specifically written for selected apprenticeship courses. Each module covers approximately four to eight hours of instruction and addresses one learning outcome in the Apprenticeship Course Outline.

Commonly Used Apprenticeship Terms - continued

Industry

These are employers and employees in any particular sector or cluster, such as building, manufacturing, service etc.

Mobile Delivery

This is technical training provided by a training institution in a geographic location where the training is required.

Registered Apprenticeship Program (RAP)

A modified apprenticeship program that permits a high school student to become an apprentice while attending school, earning credit toward both a high school diploma/credential and an apprenticeship program at the same time.

Record Book

The book provided to an apprentice by Alberta Learning, Apprenticeship and Industry Training where an employer records the hours and type of work undertaken on the job as part of an apprenticeship program.

Red Seal - Interprovincial Standards Program

A program that provides greater mobility for skilled workers to move from one part of Canada to another. It encourages the standardization of provincial/territorial training and certification programs. In the 45 Red Seal trades, certified journeymen may write an interprovincial exam and, if successful, receive a Red Seal.

Technical Training

This is the formal (in school) instructional component of an apprenticeship program, delivered by various training providers throughout Alberta.

NOTES

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Contact your local Apprenticeship and Industry Training office for more information:

Bonnyville
New Park Place, Box 8115
5201 - 44 Street
Bonnyville AB T9N 2J4
Tel: (780) 826-6142
Fax: (780) 826-1904

Calgary
Suite 300, Willow Park Centre
10325 Bonaventure Drive S.E.
Calgary AB T2J 7E4
Tel: (403) 297-6457
Fax: (403) 297-4492

Edmonton
7th Floor, South Tower
Seventh Street Plaza
10030 - 107 Street
Edmonton AB T5J 4X7
Tel: (780) 427-8517
Fax: (780) 422-3734

Fort McMurray
Box 19, 7th Floor, Provincial Building
9915 Franklin Avenue
Fort McMurray AB T9H 2K4
Tel: (780) 743-7150
Fax: (780) 743-7492

Grande Prairie
Suite 100, Towne Centre Mall
9845 - 99 Avenue
Grande Prairie AB T8V 0R3
Tel: (780) 538-5240
Fax: (780) 538-5237

Hinton
568 Carmichael Lane
Hinton AB T7V 1S8
Tel: (780) 865-8293
Fax: (780) 865-8269

Lethbridge
Room 280, Provincial Building
200 - 5th Avenue South
Lethbridge AB T1J 4C7
Tel: (403) 381-5380
Fax: (403) 381-5795

Medicine Hat
104 Provincial Building
346 - 3rd Street SE
Medicine Hat AB T1A 0G7
Tel: (403) 529-3580
Fax: (403) 529-3564

Peace River
9715 - 100 Street
Bag 900-28
Peace River AB T8S 1T4
Tel: (780) 624-6529
Fax: (780) 624-6476

Red Deer
3rd Floor, First Red Deer Place
4911 - 51 Street
Box 302
Red Deer AB T4N 6V4
Tel: (403) 340-5151
Fax: (403) 340-5153

Slave Lake
Box 787, Lakeland Centre
101 Main Street SE
Slave Lake AB T0G 2A0
Tel: (780) 849-7228
Fax: (780) 849-7356

Vermilion
Box 26, 1st Floor, Provincial Building
4701 - 52 Street
Vermilion AB T9X 1J9
Tel: (780) 853-8150
Fax: (780) 853-8203

For offices outside your local calling area, call 310-0000, then enter the ten-digit number you wish to reach. Deaf or Hearing Impaired with TDD/TTY units call (780) 427-9999 in Edmonton. Other locations call 1-800-232-7215.

You may e-mail your questions or comments to: aitinfo@gov.ab.ca

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www.tradesecrets.org